

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-147873

(43)Date of publication of application : 22.05.2002

(51)Int.Cl.

F25B 1/00

F25B 1/04

(21)Application number : 2000-337205

(71)Applicant : MITSUBISHI HEAVY IND LTD

(22)Date of filing : 06.11.2000

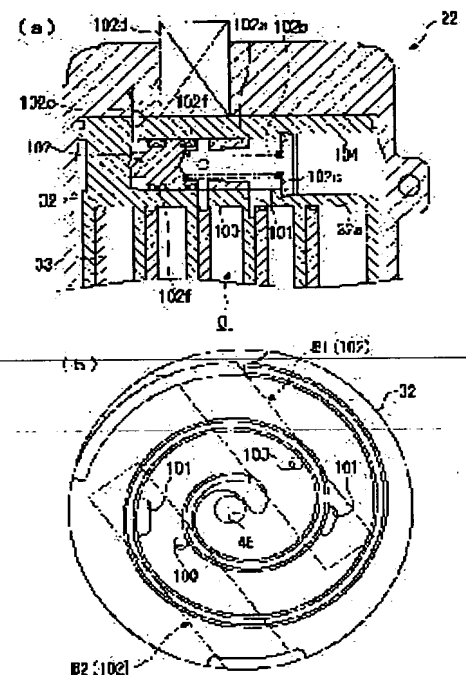
(72)Inventor : WATANABE YASUSHI

(54) CO₂ REFRIGERATION CYCLE AND METHOD FOR CONTROLLING OPERATION OF COMPRESSOR OF THE SAME

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a CO₂ refrigeration cycle and a method of controlling the operation of a compressor of the CO₂ refrigeration cycle where pressure rise of CO₂ refrigerant in a high pressure refrigerant path region accompanying rise in the rotational speed of the compressor, temperature of a gas cooler or the like is suppressed, and the circulation flow rate of the refrigerant is prevented from becoming excessively high.

SOLUTION: The compressor 22 is provided with a first bypass port 100, a second bypass port 101 and a bypass port opening/closing mechanism 102. The bypass port opening/closing means 102 controls the first bypass port 100 and the second bypass port 101, in such a manner as to open and close the ports on the basis of the conditions of the rotational speed of the compressor 22 and the pressure of the CO₂ refrigerant flowing in the high-pressure refrigerant flow path region. Thus, the pressure of the CO₂ refrigerant flowing in the high-pressure refrigerant flow path region is controlled by a combination of the bypass port opening/closing mechanism 102 and a high-pressure control valve.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office